and where the weather is tolerable, even in our valleys, when you recall the humid heat of the eastern and southern states of the Mississippi Valley, and then see what a large number of your children score below the average in height or weight—29 per cent.

What can we do about it?

The State Children's Year Program emphasizes two things that will help in the great education which must underlie a steady physical improvement of the race:

1. The County Public Health Nurse. There can be no doubt, when one has seen this nurse in action, that the normal contact with the mother can be made by a teaching nurse, highly trained, but humanly sympathetic as well. Our best American standards of health and sanitation can be carried far, wherever this nurse or these nurses are part of the County Health machinery.

2. Children's Health Centres. Outside of the large cities, any type of dispensary or clinic is unknown. The sick person calls the doctor or goes to the County Hospital, but the observation and care of the child, as is done in the Children's Conference or Health Centre, is unknown. A place where any baby or child can be brought, weighed, measured, and its diet and hygiene outlined, and its defects explained, to be corrected by care when possible, or referred for operation or medical attention to the proper points, is urged in all centres of population. A visiting Public Health Nurse and such a centre of observation, has reduced the foundling infant mortality from 59 per cent. to 3 per cent., where it has now remained for six years in San Francisco.

The development in every county of some machinery by which the tonsil and adenoid operations can be done well near home. The great demand and necessity for this operation must take it out of the hands of the specialist, and make the general surgeon, or even practitioner, add it to his field of work. As paracentesis for acute otitis media is done by the pediatricians in Boston, where the examination of the drum is made at each visit to a febrile child—and this complication is most common—so, when preventive medicine is more popularly demanded for childhood, every physician should take the training to do this operation for the removal of tonsils and adenoids creditably.

At this point an investigation has been made of the facilities of our County Hospitals for this work. Some are ready to operate on free cases among children. In the large cities the waiting list is very long at all the hospitals and clinics doing this work. Some County Hospitals refuse and some are in no way equipped to undertake this work. The County Chairmen are all investigating their county resources.

Dental Work as preventive work, is the next necessity. With a few exceptions in larger cities, this work is in its infancy in California, and yet we read that 40,000 school children in Rochester had two teeth cleanings last year, through the Eastman Dental Clinic and the work of dental hygienists, and the Forsyth Dental Clinic in Boston (also endowed) is always full of cases. Infected condition about teeth in childhood may be worked out to be quite as important a menace as focal infections in the body, followed by enlarged tonsils and diseased cervical glands, and the barriers are down for invasion.

As a result of the points urged by the California Children's Year Program, the examination of the so-called well child has been emphasized in established clinics, and seventeen Health Centres have sprung up since the program originated. Several counties have established a County Nurse, and many more have active campaigns on with the Supervisors to lead to this. Los Angeles County has appointed a physician to carry out the Children's Year Program under its Health Officer, making her Assistant Health Officer, and her campaign will be a steady one in all the towns of the county. Ten towns have been covered, and twenty-six more are programmed.

But it is to my mind a more valuable program when local doctors assist, local women organize, and when, together, they work for better county conditions for the homes and children of that county, permanent results are sure to follow.

It is hard work to look over conscientiously forty children in an afternoon, and give a word of explanation to the mother, and there is no way to measure the good you do. As a disinterested person, your advice is respected and often followed at once. The large number of correctable defects (47 per cent.) unearthed in the examination of supposedly healthy children, makes us wonder how to give to all the children what to-day the rich and the very poor homeless ones have—repeated medical examinations and guidance as health protection.

I wish to express at this time hearty and the deepest appreciation of the generous contribution of my profession to the success of California's Children's Year Program. The team spirit has made the first drive successful, and to the Council of Defense Children's Year Chairmen, and those they rallied about them as nurses, lay-assistants and doctors, is due the opportunity for this careful study of our children's health in California.

Original Articles

PLASTIC SURGERY OF NOSE AND EARS.

A Further Contribution.

By GRANT SELFRIDGE, M. D., San Francisco, Cal.

Thirty years ago, June 4, 1887, the late Dr. John O. Roe of Rochester, New York, published in the Medical Record, an article on "The Deformity Termed Pug Nose and Its Correction by a Simple Operation." In the same journal, issue of July 18, 1891, he published another article on the "Correction of Angular Deformity of the Nose by a Subcutaneous Operation" and two years later, in the New York Medical Journal, March 25, 1893, still another on "The Correction of Deformities of the Nose Resulting from Abscess of the Nasal Septum." These articles were the first to appear in this country dealing with nasal plastics. It is to this author, therefore, that all credit is due

for all that has developed in this branch of cosmetic surgery since that time, in Europe as well as here.

Jacques Joseph of Berlin, has in Katz Handbuch given the foundation, by cuts, photographic illustrations of cases and a text poorly descriptive of the work, for much of the work, aside from bone transplants, now being done in America. Even his classification of types has been followed by writers, notably Roberts in his book on "Surgery of Deformities of the Face," and Lee Cohn of Baltimore in his thesis to the American R. L. & O. Society in 1914. I have already followed the brilliant work of Dr. Wesley Carter of New York, demonstrating the value of bone and cartilage transplants in saddle nose, partial and complete, and in notched noses, and presented my work before the County Medical Society of San Francisco at the May, 1917, meeting of the Surgical Section. I will therefore in this paper refer to the following conditions calling for intranasal surgical treatment:

Hump Nose,
Long Nose,
Drop Nose,
Twisted Nose,
Prolapsed Alar Cartilage,

and will also describe the surgical treatment of protruding ears, especially what Beck describes as "roll or dog ears" and Roberts as "lop ears."

Many deformities of the nose are made up of several types, as is shown in the accompanying pictures. For instance, the hump nose is frequently too high, too long and in addition may have a drooping of the tip, too. All these conditions are due to over-development or injury to the bony structures and cartilage. The same mixture of types applies to abnormal ears. No single operation will apply to every case and one must be prepared to handle varying types as they present themselves. The technique of nasal plastic surgery is as follows: The hairs within the nostrils should be carefully trimmed and the skin within the nostrils and the external nose mopped with gasoline, then irrigated with salt solution and iodine solution applied to the skin internally and externally. Novocain solution 1/8 to 1% or quinine bi-sulphate 1% with five or six drops of adrenaline 1:1000 is injected in and around the field of operation, whether general anaesthetic is used or not.

The incision is made in front of the lateral cartilage, in many instances on both sides, and should be carried frequently to the limits of the field of the proposed operation.

In hump nose, the skin with the periosteum should be elevated from naso-maxillary junction of one side to the corresponding point on the other side. The hump is now removed with a saw or rasp and the edges beveled so the nose will not appear too broad on the dorsum after the hump has been removed.

It is rather difficult to know just when a sufficient amount of bone has been removed and in a general way an apparent slight over-correction at the time of the operation will give a better result.

Long nose is corrected by first making an incision at the muco-cutaneous margin on both sides of the septum, then cutting off the end of the triangular cartilage and with it a strip of the mucous membrane, or the entire triangular cartilage may be exposed by a submucous elevation and a wedge-shaped piece of cartilage removed. Next, an incision is made anterior to the lateral cartilages and the skin and periosteum is carefully elevated over the entire nose. Next, the incisions in the septum are sutured and covered with a narrow strip of gauze soaked in tincture of benzoin comp.

It also seems wise to carefully mop the operated area as well as the bridge of the nose with iodine solution. No suture is necessary in the incision anterior to the lateral cartilages. Adhesive plaster is very carefully applied over the bridge of the nose from cheek to cheek and around the end of the nose, from the naso-frontal junction on both sides, care being taken to pull the skin upward and kept there while the plaster is being applied. No intranasal packing is necessary. A sling of gauze should pass over the tip of the nose and be tied around the head. The plaster should be removed with gasoline in forty-eight hours and reapplied for another forty-eight hours if necessary.

Drop nose. This condition may, like the long nose, be due to over-development of triangular cartilage or it may be traumatic in origin. In the former the procedure in long nose is to be followed. In the traumatic type a pocket is dissected in the membranous septum and an inlay of bone taken from the septum or cut from the ninth rib with a small circular saw.

Twisted nose. The skin is elevated as already described and a naso-maxillary suture line exposed. This should be cut through with a saw or Lothrop Slot Forceps. The attachment of the nasal to the frontal bone cut with a fine chisel or Carter's forseps or broken with a blow from mallet on a rubber covered metal instrument handle.

I have not found it advisable to put a metal splint to keep the mobilized nose in position. A careful strapping of the nose is sufficient, unless the patient is in the habit of rolling his head on the pillows. After a couple of days the nose can be kept in position without much difficulty. The patient, however, should be kept in the hospital from two to seven days.

Prolapsed alar cartilage. A condition frequently associated with dislocated columnar cartilages and deflection of the septum. This is corrected by removing an elliptical piece of the mucous membrane, then carefully exposing the lateral cartilage, using a semi-sharp septum elevator and about one-eighth inch exposure of cartilage is made and the cartilage is removed. Two or three silk sutures are introduced and the line of incision covered with gauze, soaked in collodium, or tincture of benzoin compound and left in position until the sutures are removed. The accompanying dislocated columnar cartilage and deflected septum should be taken care of at the same time.

Protruding, Roll or Dog Ears. In general, protruding ears of various types are due to lack of development of the auricular muscles, perhaps associated with an easily stretched skin, or due to

CASE I.

Figure I.

Figure II.

Figure III.

lack of cartilage or too rigid cartilage in the region of the antihelix.

The correction of these ears is done by cutting an ellipse of skin from the back of the ear and the neighboring mastoid with the superficial fascia, care being taken to expose the periosteum and pericondrium which are stitched together with chromic cat gut and the skin sutured with silk worm gut or horse hair. Should it be necessary to remove a portion of the cartilage in the region of antihelix a second ellipse is cut, the cartilage exposed and a piece most carefully dissected from the anterior skin surface.

The greatest care should be taken to carry out to the fullest the rules of absolute asepsis as the danger in this class of aural cosmetic surgery lies in infection of the cartilage, a most disastrous occurrence when it happens.

Figure IV.

Case I presents several interesting features as are shown by the above pictures. Picture No. I shows quite a long nose, No. II the hump as well as the slight droop of the tip. No. III shows the excessive development of the nasal bone and No. IV the after result.

This case was corrected by the removal of the hump subcutaneously and the nose was shortened by taking a strip from the end of the triangular cartilage and a portion of the skin and mucous membrane at the margin of the membranous portion of the septum.

The ultimate result would have been better if a wedge-shaped piece had been removed from the nasal bone and a corresponding strip from the entire bony and cartilaginous septum, then the driving in of the entire nose. This procedure would have resulted in lowering the nose in its full length.

CASE II.

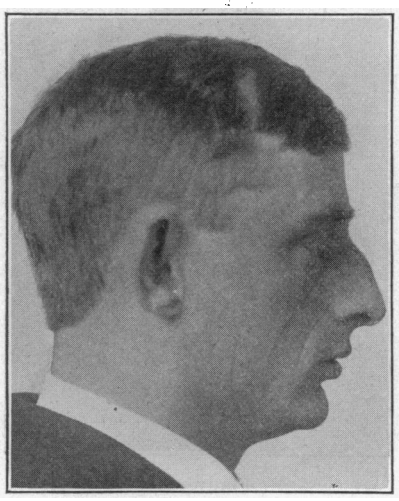


Figure I.

Figure II.

Figure III.

This young man shows a deformity as well as a deviation of the entire nose to the left. This external deviation was accompanied by a very marked deformity of the septum.

The septum was resected, the hump removed intranasally, the nasal bones divided at the junction of the maxilla and the frontal bones. This operation was done under local anaesthetic.

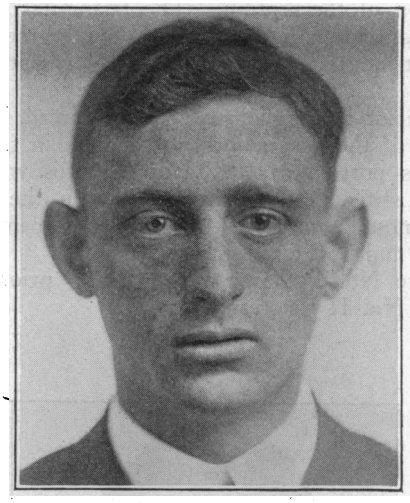


Figure IV.

Figures No. I and No. II show the case before operation, No. III and No. IV the after result.

CASE III.

Figure I.

Figure II.

This young man's external deformity was traumatic in origin and was accompanied by a marked

deflection of the septum. The triangular cartilage was fractured in its full extent, one segment lying at right angles to the other. The septum was resected and the fractured cartilage cut through, the anterior triangular segment was freed from the dorsum of the nose and its attachment in the membraneous portion of the septum. This was lifted up and stitched in a new position in the dorsum of the nose, a new bed made in the membranous portion and restitched there.

Figure No. I shows the condition prior to operation, No. II the result.

CASE IV.

Figure I.

Figure II.

This case shows a lateral deviation of the nose, a hump and a drooping of the tip. He also had a badly deviated septum. The septum was resected, the skin was elevated from the entire bony framework of the nose, the hump removed and the nasal bones divided at the naso maxillary and naso frontal attachments. The drooping of the tip was corrected by making a new bed in the membranous portion of the septum and the transplanting of a piece of the bony septum sufficient to lift up the tip.

Figure No. I and No. II show the appearance before operation. Figure No. 3 the actual result. Figure No. 4 an X-ray showing a piece of bone in position.

Figure III.

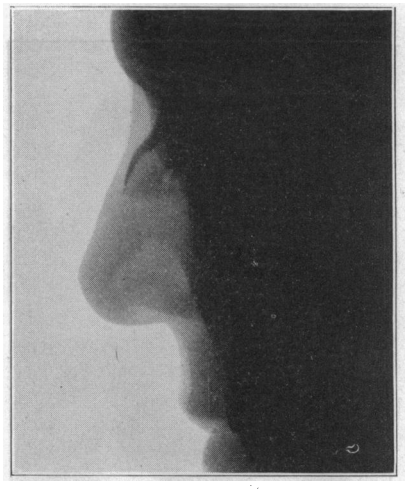


Figure IV.

CASE V.

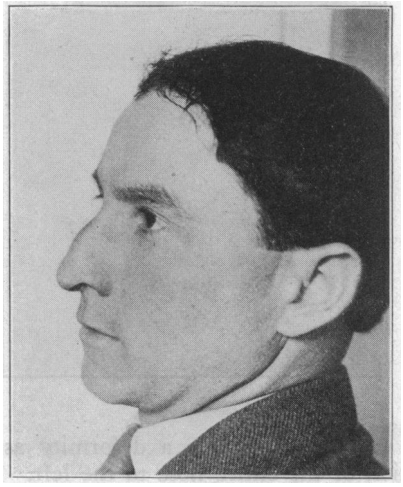


Figure I.

This young man's nose was broken while skating. Figure No. I shows the appearance before he was

Figure II.

operated. Figure No. II the after result. The young man had had a resection of the septum before I saw him. The deformity was corrected by the usual elevation of the skin, followed by the rasping down of the hump. In order to overcome the drooping of the tip it was necessary to re-operate the septum in order to find a sufficient amount of bone to use a graft in raising the tip.

This case represents the great difficulty frequently encountered while attempting to get a satisfactory cosmetic result. In this instance it was necessary to rasp down the bridge three times before the result was satisfactory to the patient as well as myself.

CASE VI.

Figure I.

Case No. VI was operated in two stages. At the first operation the hump was rasped down and at the second operation the deviated septum was corrected and a cartilaginous transplant taken from the septum, was put in a separate bed in the tip in order to raise the tip. Picture No. II shows the result.

This patient had an infection between the septal flaps following operation which was quite bothersome for a matter of ten days but finally cleared up.

Figure II.

VASE VII.

Figure I.

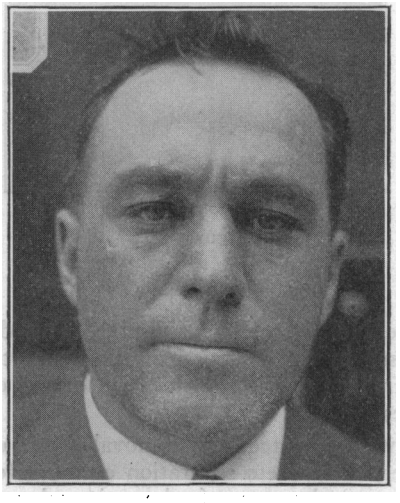


Figure II.

There is nothing particularly to note concerning this case. His nose was broken by being thrown

against a heavy table. There was a marked deformity of the septum as well as the lateral deformity. This was corrected by cutting loose the naso-maxillary attachment and a refracture of the upper end of the nasal bone, the deviated septum being corrected at the same operation. The nose was remodeled. No external splint was used.

CASE VIII.

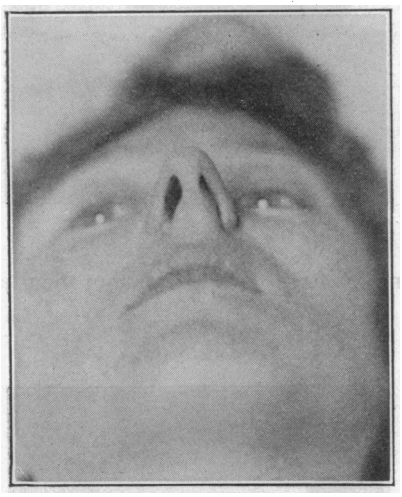


Figure I.

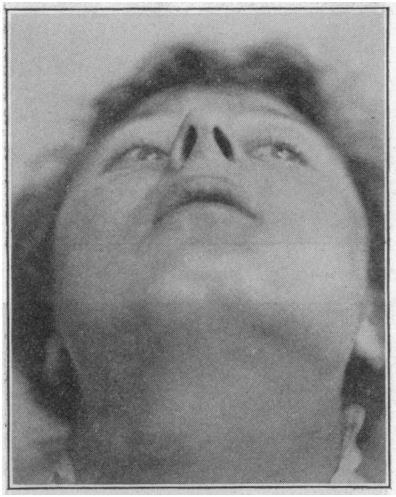
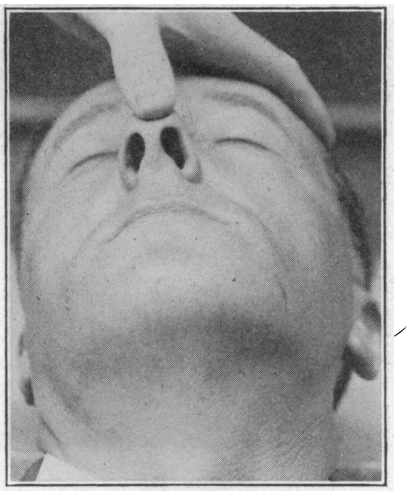


Figure II.

Figure No. I speaks for itself. This deformity was caused by a dislocation of the tip of the triangular cartilage plus the dislocation of the columnar cartilages.

This was corrected by a removal of the columnar cartilages, a complete separation of the inferior and posterior attachments of the triangular cartilage and the stitching of the anterior border into a new bed made in the membranous portion of the septum. Figure No. II shows the result.

CASE IX.



A careful study of this cut will show the prolapse of the lateral cartilages of the nose into the lumen of the nostril. This is a condition that is very frequently associated with deflection of the septum and not very often corrected. It represents one of the principal causes of failure to obtain satisfactory nasal breathing following resection of the septum.

CASE X.

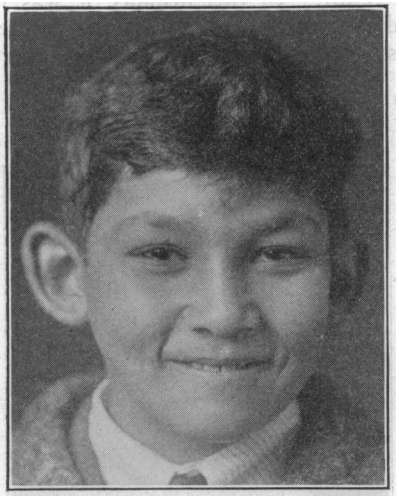


Figure I.

Figures Nos. I and II show the condition prior to operation, Nos. III and IV the after result. This case was corrected by making a double ellipse. The first ellipse was made at the upper marking of the left ear as shown in Figure II.

There was a suture abscess from the buried cat gut in the left ear which did not clear up for a number of weeks.

There was some stretching of the skin back of the ears which I believe would have been obviated had the ears been kept bandaged for a period of several weeks longer than was done. Some keloiding of the skin occurred also in the post auricular incision, which will disappear, I hope, in time. If

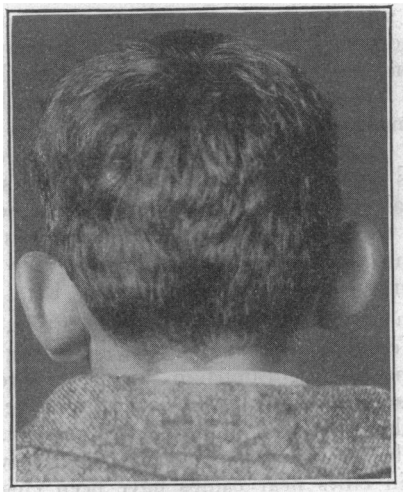


Figure II.

Figure III.

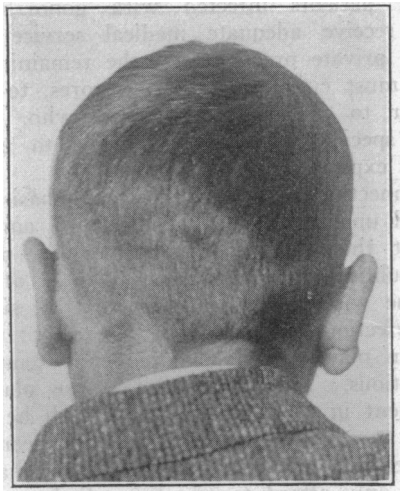


Figure IV.

not, a few exposures to the X-ray will no doubt clear it up.

Comments.

Nothing new has been offered in my two papers on Nasal Cosmetic Surgery that has not already been presented by Doctor Carter, with the exception possibly of the use of bone, bone with cartilage, or cartilage transplants in the correction of droop nose so frequently seen in injuries, or as a racial characteristic.

The interesting portion of the work, however, has been noting what can be done with one or more transplants and the end results. This is of particular interest at this moment, because of the many and varied uses of transplanted tissue, not only bone and cartilage, but fat and fascia, now being utilized by French, English and American surgeons in the correction of deformities, the result of injuries obtained in the present European conflict.

240 Stockton Street.

SOCIAL PROBLEMS OF THE WAR.*

DR. H. G. IRVINE,
Director, Bureau of Venereal Diseases, State Board of Health,

and

DR. W. M. DICKIE,
Sanitarian, Bureau of Venereal Diseases, State Board of Health.

Inasmuch as the program includes a paper on the social service and law enforcement phases of this problem, we will confine ourselves to the *strictly medical side.* We wish, however, at the same time, to place emphasis upon the fact that any campaign against venereal diseases must recognize the complexity of the problem and be prepared to attack it from all sides. While many of us who have been intimately associated with the treatment of those afflicted with syphilis and gonorrhea, have realized the terrible economic waste and the untold suffering caused by these diseases, it is a lamentable fact that we needed a great war to produce this psychological moment when the public would arouse itself to a discussion of the solution of this problem. For years carefully compiled statistics of the army and navy have been available, showing definitely the amount of disease in the ranks—figures which were distinctly indicative of conditions in civil life, and yet not until we came into this war and every family in the land began to take a personal interest in the army and navy did we really wake up to the fact that something must be done. Our government early realized the problem with which it must deal, if fit and healthy men were to go to the trenches, and the various agencies under the war department outlined a program of attack, calling upon the states to put it into force.

California may well be proud that it was one of the first states to answer the call and make an adequate appropriation for the organization of the Bureau of Venereal Diseases, which should direct and co-ordinate the campaign in co-operation with the military and naval authorities. The program which this Bureau has sought to put into practice has included an attack from all angles, but as previously stated, we shall in this paper deal only with the *strictly medical part of it.*

From the medical point of view, there are four

* Read before the Los Angeles County Medical Society, April, 1918.